

## CONTENTS

*Research Papers*

- Paradoxical signal transduction mechanism of endothelins and sarafotoxins in cultured pituitary cells: stimulation of phosphoinositide turnover and inhibition of prolactin release  
H. Lewy, R. Galron, A. Bdolah, M. Sokolovsky and Z. Naor (Israel) 1
- Effect of cold acclimation on the expression of glucose transporter Glut 4  
C. Olichon-Berthe, E. Van Obberghen and Y. Le Marchand-Brustel (France) 11
- Activity of the *CYP17* promoter in bovine adrenocortical cells before and after phenotypic switching  
D.S. Lala and P.J. Hornsby (USA) 19
- Mouse submandibular glands express an androgen-regulated transcript encoding an acidic epididymal glycoprotein-like molecule  
N. Mizuki and M. Kasahara (USA) 25
- Binding of sex-hormone-binding globulin (SHBG) to testicular membranes and solubilized receptors  
C.S. Porto, L.C. Abreu, G.L. Gunsalus and C.W. Bardin (Brazil, USA) 33
- Atrial natriuretic peptide effects in AtT-20 pituitary tumour cells  
A.F. Gilkes, K.B. MacKay, G. Cramb and S.B. Guild (UK) 39
- Molecular cloning of the bovine prolactin receptor and distribution of prolactin and growth hormone receptor transcripts in fetal and utero-placental tissues  
P. Scott, M.A. Kessler and L.A. Schuler (USA) 47
- Vasopressin biosynthesis in rodent Leydig cells  
R. Ivell, N. Hunt, M. Hardy, H. Nicholson and B. Pickering (Germany, USA, UK) 59
- Regulation of the epididymal glutathione peroxidase-like protein in the mouse: dependence upon androgens and testicular factors  
N. Rigaudière, N.B. Ghyselinck, J. Faure and J.P. Dufaure (France) 67
- Divergent differentiation of rat adrenocortical cells is associated with an interruption of angiotensin II-mediated signal transduction  
C.D. Roskelley, K.G. Baimbridge, P.C.K. Leung and N. Auersperg (Canada) 79
- Developmental expression of hepatic growth hormone receptor and insulin-like growth factor-I mRNA in the chicken  
J. Burnside and L.A. Cogburn (USA) 91
- Steroidogenesis-inducing protein interacts with transforming growth factor- $\beta$  to stimulate DNA synthesis in rat granulosa cells  
S.A. Khan, L.W. Shum, K. Teerds and J.H. Dorrington (Canada, Netherlands) 97
- Isolation of an insulin-like growth factor II cDNA from guinea pig liver: expression and developmental regulation  
A. Levinovitz, G. Norstedt, S. Van den Berg, I.C.A.F. Robinson and T.J. Ekström (Sweden, UK) 105
- Basal and gonadotrophin-releasing hormone-induced biosynthesis and release of luteinizing hormone: effect of calcium deprivation  
M.E. Apfelbaum (Argentina) 111
- Assessment of the role of cyclic nucleotides in allatostatin-induced inhibition of juvenile hormone biosynthesis in *Diploptera punctata*  
M. Cusson, K.J. Yagi, G. Xue-Chen and S.S. Tobe (Canada) 121
- Rat Sertoli cell clusterin,  $\alpha_2$ -macroglobulin, and testins: biosynthesis and differential regulation by germ cells  
J. Grima, C. Pineau, C.W. Bardin and C.Y. Cheng (USA) 127
- The cloning of the human follicle stimulating hormone receptor and its expression in COS-7, CHO, and Y-1 cells  
C.A. Kelton, S.V.Y. Cheng, N.P. Nugent, R.L. Schweickhardt, J.L. Rosenthal, S.A. Overton, G.D. Wands, J.B. Kuzeja, C.A. Luchette and S.C. Chappel (USA) 141

(continued on page 3 of cover)

Cited in *Biological Abstracts*; *Current Awareness in Biological Sciences (CABS)*; *Current Contents / Life Sciences*; *Excerpta Medica (EMBASE)*; *Index Medicus*; *Informedicus*; *Pascal M*



# MOLECULAR AND CELLULAR ENDOCRINOLOGY

## Subscription Information

1993: vols. 89-97 in 18 issues; vols. 89 and 90 will appear in 1992 but remain the first volumes of the 1993 subscription year. Institutional Rate: IR £981.50 + IR £103.50 postage, packaging and handling. Total price IR £1085.00.

Subscriptions are accepted on a prepaid basis only, unless different terms have been previously agreed upon. Personal subscription rates and conditions are available upon request from the Publisher.

Subscription orders can be entered only by calendar year (January-December) and should be sent to **Elsevier Scientific Publishers Ireland Ltd., P.O. Box 85, Limerick (Ireland)**, or to your usual subscription agent (not for personal subscriptions).

Postage and handling charges include surface delivery except to the following countries where air delivery via SAL (Surface Air Lift) mail is ensured: Argentina, Australia, Brazil, Canada, Hong Kong, India, Israel, Japan \*, Malaysia, Mexico, New Zealand, Pakistan, PR China, Singapore, South Africa, South Korea, Taiwan, Thailand, U.S.A. \* For Japan air delivery (SAL) requires 25% additional charge of the normal postage and handling charge. For all other countries airmail rates are available upon request.

Claims for missing issues should be made within 6 months of our publication (mailing) date, otherwise such claims cannot be honoured free of charge.

All questions arising **after acceptance** of a manuscript by the editor, especially those relating to proofs, publication and reprints, should be directed to the publishers, **Elsevier Science Publishers B.V., P.O. Box 1527, 1000 BM Amsterdam, The Netherlands, Fax: (20) 5803-454 (for courier service: Molenwerf 1, 1014 AG Amsterdam)**. In the U.S.A. and Canada: For further information and personal subscriptions, contact: **Elsevier Science Publishing Co., Inc., Attn: Journal Information Center, 655 Avenue of the Americas, New York, NY 10010, U.S.A., Tel.: (212) 633-3750, Telefax: (212) 633-3990, Telex: 420-643 AEP UL**.

## Information for Advertisers

Advertising orders and enquiries can be sent to the Advertising Manager, Elsevier Science Publishers, Advertising Department, P.O. Box 211, 1000 AE Amsterdam, The Netherlands, Tel.: 20-515.3220; Fax: 20-683.3041, attn Advertising Dept.

Great Britain: T.G. Scott & Son Ltd., Portland House, 21 Narborough Road, Cosby, Leicestershire LE9 5TA, Tel.: 0533-753.333; Fax: 0533-750.522, attn. Tim Blake.

U.S.A. & Canada: Weston Media Associates, Daniel Lipner, P.O. Box 1110, Greens Farms, CT 06436-1110, Tel.: 203-261.2500, Fax: 203-261.0101.

---

## Contents (continued)

Effects of pituitary hormones on the cell-specific expression of the KAP gene	
A. Meseguer and J.F. Catterall (USA)	153
Basic fibroblast growth factor enhances testosterone secretion in cultured porcine Leydig cells: site(s) of action	
C. Sordollet, C. Savona, M.A. Chauvin, E. De Peretti, J.J. Feige, A.M. Morera and M. Benahmed (France)	163
<i>Calendar of Meetings</i>	173
<i>Rapid Papers</i>	
Inhibitory effects of insulin-like growth factor-binding proteins on steroidogenesis by human granulosa cells in culture	
H.D. Mason, D. Willis, J.M.P. Holly, S.C. Cwyfan-Hughes, M. Seppala and S. Franiks (UK, Finland)	R1
Rapid increase in relaxin gene expression in early pregnancy in the pig	
D.K. Lobb and D.G. Porter (Canada)	R5

## Notes to Authors